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JAPAN AND THE NUCLEAR NON-PROLIFERATION TREATY

/ George H. Quester*

In February 1970, Japan signed the Nuclear Non-Proliferation Treaty (NPT), but this act hardly brought the reassurance to the outside world of a signature in 1968. If the treaty is finally ratified, Japan will have renounced the right to manufacture nuclear weapons for itself, or to accept them from states already possessing such weapons; the renunciation would be accompanied by submission to inspection safeguards of the International Atomic Energy Agency (IAEA), intended to assure that materials are never diverted from peaceful nuclear activities to the production of nuclear explosives.

Signature in 1968 would have suggested a ratification soon to follow. The signature in 1970 has instead been accompanied by statements that ratification will not come quickly at all, and that no decision indeed is to be implied in the mere signature of the treaty.¹ Several political developments simply made signature tactically appropriate at this time. West Germany's signature of the NPT in December 1969 might otherwise have focussed too much embarrassing attention on Tokyo's hesitation on these matters. The United States agreement to a return of Okinawa suggested at least some reciprocal gesture to substantiate the government's stress on close Japanese-American cooperation. Finally, negotiations will soon begin on the exact form IAEA safeguards will assume for countries subjected to NPT; it is probable that Japan will be able to exercise leverage in these negotiations more effectively as a state which has at least signed the treaty.

Signature was thus advisable, and all the easier because of several factors decoupling the normally speedy ratification. Since July of 1968, all of the Euratom signatures have come with provisos that ratification would not follow until specific agreement had been reached on the accommodation of Euratom and IAEA inspection procedures. Most of the Arab states signed the NPT immediately after it was offered, but will withhold their ratifications until Israel accepts the treaty, which may delay this indefinitely. Even the two super-powers delayed their ratifications for more than a year, sug-

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¹New York Times, February 4, 1970.

gesting again that one can reasonably sign a treaty without being certain of its ultimate acceptability. Japan did not have any tradition of considering ratification separately from treaty signature, but eighteen months' delay, together with the foreign examples cited above, has served to make Tokyo now perfectly capable of rejecting a pact already signed. With an American president less enthusiastically for the treaty than his predecessor, with growing economic and nationalist sentiment to oppose the NPT, ratification will depend on special and fortunate circumstances prevailing in Japan's international environment in the next few years. The NPT at the moment is neither dead nor assuredly alive in Japan.

Almost no one in Japan is at all enthusiastic about NPT. All opposition parties have taken stands criticizing the treaty. A significant part of the governing Liberal Democratic Party is also quietly unhappy about the treaty. Public opinion, to the extent that it is aware of the issue, is negative. So also is business and Japan's major newspapers. Wherefrom springs so much reluctance and opposition, when Japan has no imminent need for nuclear weapons, when it is either protected by the American nuclear umbrella, or unprotectable by any means? Given Japan's nuclear allergy in the aftermath of Hiroshima and Nagasaki, why is NPT not made-to-order for Japan? The Japanese response is interesting, in part because it illustrates feelings that may show up in other nations reaching serious economic development.²

As little as five years ago, an NPT would have sailed through ratification in Japan with as little discussion and resistance as the 1963 Test-Ban Treaty. A step toward disarmament, a product of new Russian-American understanding, such a treaty might have been endorsed by most if not all the opposition parties. As little as three years ago, opposition within Japan had really shown itself only among representatives of the Japanese electrical industry, urging more caution before Japan committed itself to an arms control program that might be economically injurious. Yet the opposition of such industrialists has supplied the essential core around which other layers of resistance now have been able to form.

COMMERCIAL OBJECTIONS

Industrial objections to NPT have tended to hinge on the IAEA safeguards that will be required in Article III. If nothing else focussed Japanese attention on the safeguard question, it was the delay in inserting an agreed Article III into the Soviet-American draft, and the prior debate on Euratom vs. IAEA procedures that occasioned this delay.

Japanese objections to external inspection take a number of forms.³ To

²For a discussion of some of the same questions on the NPT from a Japanese point of view, see Ryukichi Imai, "The Non-Proliferation Treaty and Japan" *Bulletin of the Atomic Scientists*, May, 1969.

³A statement of the grievances of Japanese industrialists on inspection by the IAEA can be found in *Atoms in Japan* (Japan Atomic Industrial Forum, Inc.) February, 1968, pp. 3-5.

consider even a trivial aspect, a language problem will arise, since Japan (unlike some other countries) conducts and records its scientific operations in Japanese rather than English; it will take some time and effort and cost some money to translate and maintain duplicate records for non-Japanese inspectors to review.

More broadly, there is an inherent conflict between greater assurance to the outside world that no bombs are being produced, and economically efficient operation of power reactors. Hints of such conflict have already arisen. Most physicists estimate that only about 2% of the plutonium produced in power reactors would inevitably be uncontrollable; but Japanese electrical power company officers have suggested that anything greater than 90% certainty in inspection will constitute an unbearable economic burden. To some extent one can not watch something without changing it. At the extreme, to measure the exact output of plutonium in a reactor, or to be certain of how much uranium is in its core, one might have to shut the reactor down from time to time, or otherwise complicate its operation. While it might have been clearly acceptable to shut down a research reactor in the early days of Japanese nuclear activity—first under U.S., British, or Canadian inspection, then under the IAEA—such a shut-down would be intolerable if it interfered with Tokyo's electrical power.

As IAEA inspectors now have their first serious power reactors to monitor, anticipations of dissatisfaction have emerged among Japanese industrialists. An inspector who is congenial and spends half the morning sipping tea is one thing; one who insists on seeing all records or all fuel stocks is another. An inspector who comes every four months for a week is clearly bearable; one who comes eight times a year for three weeks at a time might not be. Fears of commercial espionage are also sometimes cited, given the likely temptations for sale of information on commercial reactor designs to rival companies outside of Japan. For the moment this is a somewhat abstract possibility, since some years will have to elapse before Japan begins designing and producing any commercially competitive reactors for export.

Reactor shutdowns and commercial espionage may thus well be rather symbolic and unlikely bogies, but other aspects of inspection still promise to be a nuisance, a nuisance which can reduce monetary profits now that atomic energy has become a commercial enterprise. The costs of inspection may always be trivial compared to the defense budgets of the various states; yet in the accounting of a particular firm, such costs may constitute a drainage of profits few corporation presidents could justify.

The mere uncertainty of emerging industrial prospects makes it very difficult to predict how costly monitoring and supervision will be.⁴ For the future, Japanese industrialists envision themselves constructing enrichment plants for the reprocessing of plutonium, and then fast breeder reactors. If today's power reactors can indeed be adequately policed without seriously

⁴A good basic discussion of the possible problems on safeguards is presented by Arnold Kramish, "The Watched and the Unwatched" *Adelphi Papers*, No. 36 (June, 1967).

handicapping the production of electrical power, it may be much more difficult to achieve a 90% or 98% degree of control on fissionable materials in the future. As the quantities of fissionable materials handled increase, moreover, even a 2% leakage may suffice for a politically significant clandestine weapons stockpile.

To refer to a relatively secondary consideration, fears are often expressed that members of the IAEA safeguards staffs would engage in industrial espionage, or perhaps in obstructive legalism even in an honest exercise of the control function. Under IAEA procedures, nations may reject any particular individual as an inspector if they feel this is necessary, yet this has never seemed to be particularly reassuring to Japanese officials to whom the NPT was being described. The explanation is interesting. Throughout its relatively short diplomatic history, Japan has apparently been extremely reluctant to expell diplomats *persona non grata*. Whether or not this stems from a special concern for the dignity and possible humiliation of the individual, it explains a small portion of the concern on inspection procedures.

None can argue against all inspection whatsoever. No government is going to allow private electrical power companies to dispose of fissionable materials as they wish. Thus Japan must inspect and monitor its atomic energy industry, just as the AEC monitors that of the United States. Yet there are some significant differences between national inspectorates and those which would most probably emerge from NPT. The national atomic energy agency is not only a mode of control but also a source of technology. indeed probably a primary source. Inspection by those of the same nationality, by those who also do some of the work, is much more acceptable, psychologically and ideologically, than inspection by outsiders who only ask questions. When safeguards on British-supplied equipment were handled on a bi-lateral basis, the same British personnel served as inspectors and technical advisers, a much more popular arrangement in Japan than with the introduction of IAEA as the safeguarding body.

A number of Japanese are thus urging a much more permissive standard for all internationally operated safeguards, sufficient only perhaps to force any government wanting to make a bomb to do so deliberately and fairly explicitly, to force the government to have a responsible and effective national accounting system. Countries with non-antagonistic relations with their neighbors (such as Japan) might not have to undergo probing inspections of their nuclear facilities, if clandestine manufacture of weapons was highly unlikely in any event. Yet it must be acknowledged that confrontations as between the Arab states and Israel might require much more than an effortless 90% degree of certainty, and the establishment of an IAEA double standard to distinguish between Israel and Japan will be politically difficult.

For the Japanese to grumble about inspection is a little misleading in any event. Unlike the Euratom countries, who had been inspecting themselves and could have hoped to continue to escape outside monitors, the Japanese

would have had to expect inspection in any event for the immediate future, at least until the emergence of Japanese-produced equipment utilizing Japanese-produced fuel. With Japan's lack of uranium deposits, the latter was unlikely, except on a very small scale. Japan has thus not become accustomed to any self-inspecting system, compared to which IAEA procedures might constitute a new and unpleasant nuisance; all reactors currently in Japan have been safeguarded either by the donor nation or more recently by the IAEA.

To some extent, then, the Japanese have been echoing German and Italian objections to NPT, objections relevant for Japan, but not relevant to NPT. By objecting to what NPT would impose on Germany, the Japanese are in effect complaining about what would have been maintained in Japan, NPT or no. For the longer term, NPT would have committed Japan to accepting safeguards even where it might otherwise have escaped it, which possibly accounts for suggestions for a time limit to NPT, the distinctive Japanese contribution.⁵ At about the end of the 5-year limit that Japan was proposing, the first Japanese facilities free of inspection under the old rules might just have been coming into operation. The time limit can be interpreted along other lines also, as Japan's contribution to the battery of arguments against the treaty. The anti-NPT coalition to some extent involved each recalcitrant nation stressing a different objection, which the others could then echo and cite. In truth, the positions of the recalcitrants are enough dissimilar so that it would be difficult for them to stress all the arguments jointly and evenly.

Japanese endorsements of Euratom objections to IAEA procedures indeed are only one side of the bargaining coin, for Tokyo shares interests with both camps of the Brussels-Vienna argument. Tokyo desires Euratom to win as many exemptions as possible, just as long as Japan gets to share in each and every one of these exemptions. But it is determined to oppose any special privileges for Euratom that other advanced states would not share.

The counter-argument of Europeans, and even Americans, is that Euratom involves an adversary process of controls that could not be produced by a purely national Japanese inspection system, no matter how technically proficient the latter might be. Belgians can be counted upon to distrust West Germans, but can IAEA or the world really count on Japanese to monitor and distrust other Japanese? Some very vague speculation has thus emerged of the possibilities of Australia and Japan, plus some other states, forming a consortium to control the uses of peaceful nuclear activities, in some manner sufficiently "joint" to win whatever special treatment the IAEA accords Euratom.⁶ Yet the difficulties of getting such a multi-national arrangement

⁵For the Japanese official statement of position on the NPT and on imposing a time limit on its duration, see United States Arms Control and Disarmament Agency, *Documents on Disarmament: 1968* (Washington, D.C., U.S.G.P.O.: 1969) pp. 309-314.

⁶Interviews in Tokyo and Washington, D.C.

going are not trivial, and this could probably not be arranged in time for the onset of NPT. For the moment, Japan must be counted in the opposition to any treatment of the Euratom system which would differ from that applied to national inspection systems; if Euratom does win special concessions, the threat is implicit that Tokyo would find this a cause to delay or reject ratification of the NPT.

There is also an underlying issue of legal principle or nationalism here which will fester in any country contemplating adhering to NPT. It is one thing to ask businessmen to accept international inspectors over property delivered from some foreign country; a believer in property can not deny that sellers have the right to place any conditions they please on how and what they sell. It is quite another to impose international inspection on what a nation has produced and will produce for itself. NPT does not introduce the international inspector, except to some extent within the Euratom area. Rather it introduces an entirely new justifying principle for inspection, international consensus by treaty, rather than straight-forward property rights. Property rights as an effective control on nuclear weapons proliferation might soon have collapsed, as the nuclear field becomes more and more a competitive buyers market. Yet signing away one's right ever to truly "own" nuclear resources may seem a viscerally unpleasant requirement to impose on Japan, or on any country like Japan.

In the earliest days of the development of the IAEA safeguards system, the Japanese government in fact had generally favored such efforts, encouraging the IAEA to be aggressive in accepting responsibilities offered it from various bilateral arrangements. If the Japanese electrical industry is now reluctant to see such inspection extended or permanentized, it might thus seem ironic, perhaps demonstrating that the government had not consulted its industrial sector extensively enough to protect its national interest. Some industrialists are in fact prepared to accuse the Foreign Ministry of not having raised objections early enough. Yet again the relative slowness of Japan to develop its nuclear industry would have made a determinedly resisting Japanese posture somewhat premature in 1962 or even in 1967 or 1968. Rather more logical for the Japanese self-interest would be temporary acquiescence in inspection and controls, followed by demands for complete review at about the time an indigenous Japanese program became feasible. Hence the suggestions for a 5-year time limit on the treaty, or for periodic reviews of its workings.

Thus the economic arguments against signing or ratifying an NPT have been the vanguard for the Japanese opposition. The arguments have had a precisely material content, or have reflected a more general sense that Japan's political or property rights were gratuitously being signed away. The latter style overlaps in peculiar ways with the broader range of political and military questions discussed earlier, drawing in some nationalistic elements previously submerged in the aftermath of World War II.

POLITICAL OBJECTIONS

Japanese in general do not feel the more immediate disparagement by Western states that so much disturbs the Indian elite. Yet there is a sense that Japan is not quite acknowledged as a great power, that her feelings on various tangible and intangible matters are being ignored. The tangible issues have included Okinawa, the Security Treaty and its American bases within Japan, Soviet occupation of the Kuriles, and partially as a symbol, the Nuclear Non-Proliferation Treaty. Less tangible questions include whether or not Japan is automatically included in serious international discussions such as at the ENDC, or even whether permanent Japanese membership in the UN Security Council is much discussed abroad.

By withholding its signature in the summer of 1968, Japan indeed clearly signalled that concessions might be required to win approval of the NPT. The admission of Japan (together with Mongolia) to the Geneva disarmament negotiations in the spring of 1969 were responsive to arguments that Tokyo was reluctant to become party to agreements it had no role in drafting. Yet by 1969, more than this was probably required to make the treaty acceptable to the Japanese.

The overall trend in Japanese political sentiment, left and right, can perhaps be summarized best as a growing indifference to satisfying foreign standards for Japanese behavior. The stream now includes an ever-more idealistic left pacifism which condemns the U.S. and USSR almost evenhandedly, an isolationism that urges Japan to consider primarily her own welfare, and a renewed nationalism or militarism which urges expansion of armed forces and seeks overseas activities for the Self-Defense Force. As in other countries, a retained right to make nuclear weapons might seem to count for something even if the right were never exercised. Even if no serious thought is ever given to the possible use of such weapons, NPT seems a symptom of Japan's being taken for granted as an acquiescent non-great-power, or as a permanently second-class loser of World War II. As in other countries, also, abstract scenario-painting of the Gallois variety can conjure up wars in which the United States can not be counted upon to defend Japan, where Japan presumably must expend the greatest efforts to defend herself. Such speculation does not have to be serious to be significant, in rounding out a line of reasoning opposing NPT on nationalist grounds. Even the Left opposition can echo some of these arguments; if the Security Treaty is to be denounced, one denounces with it any assumption that such a treaty would really motivate the U.S. to come to Japan's aid in a World War III. Most of those sounding these lines of reasoning will for the moment be content to retain a legal option of weapons manufacture; a few, of course, on the same nationalistic impulses, will want to go further and exercise the option.

The Japanese "nuclear allergy" has perhaps been over-rated or taken too much for granted since 1945. There is no doubt a great deal of serious

revulsion to any nuclear military weapons in the aftermath of Hiroshima and Nagasaki, but there also has been a conscious exploitation of U.S. and other guilt feelings with regard to the first and only use of nuclear weapons. Given the need to reacquire a respectability after World War II, it would indeed have been surprising if the Japanese did not encourage westerners who wished to feel guilt over Hiroshima and Nagasaki. Hence there is still only a minority of Japanese who would even be willing to admit a desire for nuclear weapons for Japan, 25% by 1963, itself a surprisingly large total. Yet in the same poll some 50% predicted that Japan would at some point acquire such weapons, a "resigned prediction" that perhaps suggests more accurately the limits of the real aversion to nuclear weapons.⁷ Furthermore, younger people, less consciously aware of the horror of Hiroshima or Nagasaki, or less guilty about Nanking and Pearl Harbor, will be less reluctant to consider nuclear weapons for Japan.

The United States has hardly done all it could to reinforce the allergy and this increases the general Japanese confusion about the non-proliferation treaty. If one had concentrated exclusively on selling NPT, one would have tried to discredit all military nuclear equipment. But the U.S. has been reluctant to let the "nuclear allergy" make it difficult or impossible for American aircraft or naval vessels to pass through the area. Emergency access to bases in Japan will be helpful for the defense of Korea, if nothing else, and the extent of U.S. respect for Japan as a nuclear-free-zone has thus purposely been left somewhat obscure. The United States has committed itself to consult the Japanese government before bringing any nuclear weapons into Japan; no such consultations have been announced. U.S. nuclear-powered naval vessels have called at Japanese ports from time to time; some observers charge that these calls have been more frequent than necessary, with the intention of "curing" the Japanese of their allergy. The Japanese Left chooses to demonstrate at the arrival of any submarine propelled by nuclear power-plant, or any aircraft carrier with planes normally delivering nuclear warheads. The commitment to consultation does not require that American aircraft carriers divest themselves of nuclear warheads before calling at Japanese ports.

If the force deployment question no longer pertains so directly to Japan, it has certainly been significant for Okinawa, whose return to Japan has now been agreed to for 1972. Okinawa, supporting a vast complex of American logistics bases and an important air base, has in no way been covered by the implicit American pledge not to deploy nuclear weapons into Japan. For a time, American negotiators seemed anxious to win an exemption for American bases in the Ryukus, even after they reverted to Japan. At later points, the nuclear question was dropped, more because of particular Japanese sentiments than possible conflict with the logical tone

⁷For some very comparable figures on Japanese public opinion on nuclear matters, see Yasumasa Tanaka, "Japanese Attitudes toward Nuclear Arms," *Public Opinion Quarterly*, Spring, 1970.

of the NPT. Yet the tone of the bargaining then was focussed instead on American rights of access for conventional forces on the island. At no point has the valuable concession of Okinawa been channelled to extract the counter-concession of an acceptance by Japan of NPT. American priorities simply have not given that much precedence to the treaty.

As with other nations resisting NPT, a certain indifference to the outside world now seems widespread among Japanese elites, both right and left, and probably also in the Japanese voting public. It is not surprising that the Japan Socialist Party has decided to oppose NPT, along with demanding the return of Okinawa and termination of the Security Treaty. With a "holier than all of you" attitude, the Socialists can denounce both the U.S. and the USSR for not including full disarmament in the treaty, and hope to win votes as the Liberal Democrats hold the unpopular task of pushing the treaty through. Attempts by Foreign Minister Miki to negotiate a multi-party agreement not to make the treaty a political issue were fruitless or even counterproductive, for the drift of public opinion had already evidenced itself enough to suggest that the government has a heavy cross to bear on NPT.

The more moderate Democratic Socialists, far less opposed to the American alliance, have also tended to criticize the treaty. So indeed has Komeito, the somewhat "right-wing" opposition party of the Sokka Gakkai religious sect. More surprisingly, perhaps, so has the Japanese Communist Party, despite the USSR's co-authorship of the treaty.

For the Japanese Communist Party (JCP), opposition to the Non-Proliferation Treaty could serve a number of purposes. At a time when the USSR was confronted with greater Communist dissension in Eastern Europe and elsewhere, NPT is perhaps an easy issue with which to "defy" the USSR. For Moscow, the material cost of the defiance may not be so great, for the JCP's opposition can not by itself prevent ratification of NPT. It is not even clear that the USSR could or would pressure the JCP to adopt a pro-treaty position. The opportunity to embarrass the ruling Liberal Democratic Party on the issue might seem attractive enough for Moscow to allow the JCP to win some domestic support. It may be that the USSR is really concerned to get Japan to forswear nuclear weapons; but Japan is not the most pressing substantive threat for the moment, and bullying the JCP on the question will be less politically profitable than bullying the LDP. The Japanese government hence will be under a two-fold attack from the "Communists" on the NPT issue—by the JCP which denounces the treaty, and by the USSR which periodically calls on Japan to sign it.

Even within the Liberal Democratic ruling party, support for NPT is anything but obvious. A television personality running as an LDP "glamour" candidate for the Upper House in 1968 won a record number of votes while criticising NPT and declaring that Japan had a significant nuclear future. The unanimous unwillingness of opposition parties to support the treaty obviously frightens many within the LDP, and its encourages some who

hope to use opposition party stands as their own excuse never to ratify the treaty. With other unpopular stands to be taken in 1970, specifically on the Mutual Defense Treaty, the LDP could thus confront the U.S. with a supposedly exhausted bank account of popular toleration for its programs, with the implication that any NPT ratification must be postponed. Whether the opposition will ever go to extra-parliamentary extremes to block the treaty is not certain. 1970 is a demonstration year in any event, and a "demo" against the Security Treaty can easily do double duty as a protest against NPT. The treaty, moreover, is the only unpopular item that for the moment would require positive action by the Diet. The government is defending the legal status quo in Okinawa and on mutual defense; if the Left opposition felt it must frustrate something, NPT ratification would be the only "American-dictate" to block by jumping the processes of the Diet.

There is at least one strong argument for Japan's adhering to NPT, which will motivate the most responsible and moderate elements in the LDP to try to get it through; as mentioned earlier, Japan still will require large inputs of foreign technical assistance in the nuclear field, assistance which might not be forthcoming if NPT were rejected. IAEA safeguards might still be negotiated on a project basis if NPT had not been ratified, allowing Japan to approach nuclear self-sufficiency without having signed away her military option for good; but fuel supply problems would remain, perhaps indefinitely into the future. Moreover, while American technical assistance would still be legally possible under IAEA supervision even if the U.S. were party to NPT and Japan was not, it is not clear that such assistance would be granted.

GOING IT ALONE

Yet the U.S. will soon have lost much of its monopoly position in the nuclear field; the prospect of some other advanced countries rejecting NPT may yet weaken the resolve of those Japanese who now see it as a necessary evil. One cannot predict which nations in the end will have accepted NPT and which will have rejected it; nor can one foretell the political and emotional processes that may have been aroused in rejections, in the defiance of the great powers. It is at least possible that such states as have rejected the treaty will look each other over after the dust has settled, perhaps to cooperate commercially and otherwise outside the NPT-IAEA system. If such a list includes India and France (almost for certain), South Africa, Brazil, Israel, and Japan, it is not absolutely clear that atomic research, peaceful or otherwise, will have been crippled in this group.⁸

The new Japanese indifference to world opinion works in several directions. Western commentators on attitudes toward NPT have often speculated that Japan should be concerned to avert the spread of nuclear weapons

⁸A comprehensive picture of the inevitable spread of nuclear technology in this region can be found in C. F. Barnaby, (Ed.), *Preventing the Spread of Nuclear Weapons*, (London: Souvenir Press, 1969).

to India and Pakistan, or to the Middle East. The need to impose an effective NPT on these areas presumably would lead Japan to submit herself to parallel controls. Yet the realities seem to be that there is little real concern among any part of the Japanese political spectrum with the Middle East or India. While Americans might see "brother Asians taking an interest in each others problems," most Japanese show almost a complete indifference on whether India will sign NPT or not, on whether India produces bombs or not. If too many other nations joined the nuclear club, this might be invidiously embarrassing for Japan, but the immediate military risks of nuclear warfare in the Middle East or South Asia play far less of a role. Acquisition of nuclear weapons by North (or South) Korea would raise tensions, and if NPT with safeguards prevented that, this would have some redeeming benefits; but such proliferation for the moment depends far more on policies adopted by Communist China or other nuclear weapons states, rather than on the unchecked nuclear industries of smaller countries.

It now seems clear that India will refuse to sign the NPT.⁹ A certain possibility exists that India will not even adhere to the terms of NPT, but will go ahead to begin producing nuclear weapons. A question therefore remains on whether Japan can be counted upon to deny assistance to India in weapons-related technologies, particularly rocketry and computers. Indian interest in Japanese rockets as potential military vehicles has already been suggested at several points, and it is rumored that a test range facility in India has been offered to the Japanese rocket program, to spare Japan the costs of despatching ships to sea to monitor its test-firings in an over-water range. For military purposes, Japanese rockets are generally understood to lack accurate guidance systems, which might inhibit their value for striking at any but the most sprawling targets. Yet other sources (perhaps France?) might be approached by an Indian government if it needed guidance apparatus for Japanese rockets, and Japan has already earlier sold space-research rockets to Indonesia and Yugoslavia (according to some rumors, also to Israel). Given the commercial temptations involved, there seems little certainty that the 6th nuclear power will face any embargo from Japan on the kinds of goods that might significantly help a military program. A number of Japanese have referred to the notorious Japanese non-participation in the embargo on Rhodesia as suitably analogous to what would happen in the Indian case.

EXERCISE OF THE NUCLEAR OPTION

If Japan now rejects the NPT, production of nuclear weapons may still be unlikely, for the military situations in which such arms could be useful are not obvious. The most acceptable weapon for bypassing the "nuclear allergy" is ABM, but this will remain impractical as long as likely enemy missile launch sites are all so close to the Japanese homeland. Yet as the

⁹The author's views on Indian attitudes are more fully presented in G. Quester, "India Contemplates the Bomb," *Bulletin of the Atomic Scientists*, January 1970.

allergy continues to erode, Japanese scientists will definitely become more and more equipped to produce bombs when requested, and imaginative Japanese strategists may yet find scenarios where nuclear weapons would be appropriate.

For the moment, the Navy or Naval Self-Defense Force is most easily introduced into significant operations. Its ships have for years undertaken long cruises to make courtesy calls in Europe and North America, when Parliamentary opposition would have precluded any external maneuvers by army or air force. Perhaps at American urging, the Naval Force may soon begin visits into the Southeast Asian area. If anti-submarine warfare is to be the principle *raison d'être* for such forces, the possibility of nuclear warheads for depth charges has already been put to discussion within Japan. Like ABM, such nuclear warheads would not be directly aimable at any civilian target, and in some sense could only be used "defensively." If this use for nuclear weapons can be conjured up, so perhaps can others. Like such justifications all around the globe, they must always be taken only half seriously, for the sheer glamour of handling such weapons will have an appeal of its own for many military professionals.

For the moment any Japanese move to nuclear weapons runs the risk of a severe alienation of the U.S., and of the USSR. Even Communist China, in a reversal of its normally light-hearted endorsements of nuclear proliferation, has stated that Japan under no circumstances should contemplate acquiring nuclear weapons.¹⁰ How these great-power attitudes will evolve over time is problematical. If India, for example, defys the NPT sponsors and suffers no serious retaliations, then Japan may be much less dissuaded.

For the moment, also, any move to nuclear weapons still risks a severe domestic reaction from the Japanese opposition parties. Yet an all-out attack on NPT may leave the opposition with its momentum going in all the wrong direction for effective anti-bomb agitation. If a member of the LDP were deliberately trying to set Japanese public opinion up for an acquisition of nuclear explosives, he could hardly do better than to have the Socialists defeat NPT in a bitter campaign which saw both the U.S. and USSR denounced. The futures of the NPT or nuclear weapons in Japan depend also on the succession to Prime Minister Sato. The most powerful candidate within the LDP at present is Finance Minister Takeo Fukuda, who has been critical of the NPT, and has expressed an open mind on Japan's military nuclear option. Takeo Miki, the former Foreign Minister, has expressed himself more favorably on the treaty, but he is less likely to succeed Sato.

Any real Japanese desire for nuclear weapons will obviously depend on an eroding American image in East Asia in the aftermath of Vietnam. If the U.S. makes only a moderate withdrawal from the region, less drastic Japanese responses will seem in order. But if the withdrawal from Vietnam

¹⁰See "No Nuclear Arming by Japanese Militarism is Permissible," *Peking Review*, April 19, 1968.

comes to include Laos, Cambodia, Thailand, Indonesia and the Philippines, it will be difficult for Japanese (or Australians) to accept assurances that America is committed to their defense as ever.

Even if all of the underdeveloped East Asian states should fall to revolutionary movements, this would not pose any direct military threat to Japan. Yet the decline of American prestige would tempt many Japanese to fill an apparent military vacuum. Tokyo is not going to send ground forces to replace those of the United States. Stabilizing the politics of Southeast Asia through Japanese economic weight thus depends entirely on some other source (presumably the U.S.) checking the military ambitions of the revolutionary forces, to provide a screen behind which Japanese investment could take place. In the event of a more total Communist military victory, the Japanese "replacement" of American power rather would take less committing forms, a bolstered naval presence which showed the flag extensively, but always a discrete 12 miles offshore, and perhaps the acquisition of nuclear weapons.

The combination of events is thus moving to make nuclear weapons more acceptable in Japan. The NPT, if ratified, could head this off. If ratification is frustrated, however, pro-bomb tendencies will have been accelerated.

Technology is working to make bombs easier, and to allow a less explicit approach to military projects. If the government is openly reluctant to exercise the weapons production option it retains after a rejection of NPT, the question might yet arise of clandestine or semi-clandestine bomb manufacture. The Japanese legal situation on atomic energy is a little peculiar in that firms engaged in nuclear work are required to state publicly the nature and purposes of their research. Some opponents of NPT are prepared to argue that this is a sufficient guarantee against any clandestine military projects, but others have noted that firms are not required to disclose their "commercially valuable" secrets, and that the distinction between military and commercial ventures is not that clear. A few commentators have feared that such openness of Japanese science as accompanies this law will allow some other weapons-seeking state to exploit even relatively innocent Japanese research. Given the likely reluctance of the Japanese Diet to change the status quo in the direction of an NPT ratification, any outside-encouraged move to change the anti-secrecy laws is also unlikely to be well-received.

The issue of the openness of Japanese nuclear activity is somewhat interestingly confused by the distribution of political attitudes amongst those Japanese with talents essential to manufacture of a bomb. As much as Japanese physicists in the university community might resent and oppose outside inspection, their domestic political outlook is still very Left, decidedly anti-weapons, and quite distrustful of the intentions of the ruling LDP. It thus is not totally implausible that a Japanese clandestine weapons program would be exposed by Japanese physicists themselves, and that "self-inspection" in the pluralistic Japan of the 1970's would be as reliable

as self-inspection within Euratom. The attitudes of the Left-leaning Japanese scientists thus cut at NPT in opposing ways; it concurs in the need for controls on the government, but seems to make such controls redundant.

Since opinion polls indicate that aversions to nuclear weapons are declining among younger Japanese, this presumably includes younger physicists and engineers also, those who perhaps do not remember Hiroshima and Nagasaki. But the attitudes of those over 35 remain firmly anti-bomb; here the strongly hierarchical structure of Japanese university life holds a paradoxical advantage from a leftist point of view, as little tolerance has been shown any junior scientists expressing more "open-minded" stands on Japanese nuclear weapons. Whether the essential minimum of scientists required for a clandestine government bomb project would fall so low as to escape this kind of control and exposure may be a question only time will settle. Increased employment opportunities in the applied nuclear physics of the electrical industry over time may weaken this academic control over junior physicists' pro-bomb impulses.

Japanese decisions to produce nuclear weapons are thus still some good distance off; even the ability to produce weapons is a little further off than a more alarmed view would have it. For the moment the more serious problem is the severe damage being done to any genuine domestic resistance to Japanese nuclear weapons. The process of considering NPT is driving the opposition parties hurriedly to create new ad hoc rationalizations of position where previously these would have come automatically. It allows some members of the governing party to profess to be for renouncing weapons, while quietly contemplating the prospect of never having (or being allowed) to do so. When inevitable generational changes of attitude and inevitable technological progress are added to this, it is not really clear what will foster opposition to a Japanese weapons program in the late 1970's, except a firm adherence to NPT now; yet this adherence can not be assured. Much will depend on who else signs and ratifies the treaty, and who defies it by actually detonating a nuclear bomb. If Germany ratifies, but India detonates, Japan will watch the world's reactions closely before deciding how to act. If neither happens, but the world stands still with many signatures and few ratifications. Japan will probably not be the first to ratify.

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PEACE AND POWER IN INDIA'S NUCLEAR POLICY

/ Ashok Kapur

In the study of social sciences an analyst is frequently faced with two types of possible errors. The first is represented by the danger of rejecting a hypothesis which should have been accepted, and the second one is of accepting a hypothesis which should have been rejected. In either case the problem is to avoid forcing an explanation. The ideal form of explanation requires that the facts should automatically explain the phenomenon under investigation. However such an ideal situation is infrequent and if the explanation is too obvious there is danger that it may not be too useful. Thus frequently one is inclined to look for facts which contain the elements of a potential explanation in which the analyst, through analytical skill, is able to present an argument. Analytically therefore, the form representing the organization of facts is equally important because without the necessary form the facts cannot speak for themselves. In other words, reality is not self-evident and an analytical structuring is necessary for presenting facts in a communicable fashion.

I have emphasized this point because in a strict sense of the term there is no systematic body of codified Indian defense doctrine which may help us understand the role of power in Indian policy. To quote K. M. Pannikar:

Thus, India had till independence lacked an effective military tradition. She had developed no doctrines of warfare with a corpus of theory, no effective inherited organisation, no knowledge of the progress of warfare in other countries. India in fact did not have an effective system of defence. The human material was superb. From the point of view of courage, endurance, ability to act with discipline and self-control, the Indian armies trained by Britain have proved themselves to be second to none. But neither under the British, nor under Indian rule was there developed in India a proper military tradition based upon experience of warfare in the countries or with a coherent and effective doctrine of it own.¹

The absence of an Indian military doctrine is somewhat perplexing be-

¹K. M. Pannikar, *Problems of Indian Defence*, (London: Asia Publishing House, 1960) pp. 21-22.